

Appl. No. 09/840,055
Amdt. dated March 15, 2005
Reply to Office Action of Nov. 30, 2004

REMARKS/ARGUMENTS

I. Introduction

- Claims 1-25 remain in this application.
- Claims 1-12 are currently amended.
- Claims 1-25 stand rejected.
 - Claims 1-12 stand rejected under 35 U.S.C. § 101.
 - Claims 1-3, 6-7, 9-16, 19-20 and 22-25 and 26 stand rejected under 35 U.S.C. § 102(a).
 - Claims 4-5, 8, 17-18, and 21 stand rejected under 35 U.S.C. § 103(a).
- Claims 1 and 13 are the only independent claims.

II. Rejections under 35 U.S.C. § 101

Claims 1-12:

Claims 1-12 stand rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. As the examiner pointed out in section 3 of the Office Action, the claimed elements in claim 1 are software components. Therefore, the preamble of Claim 1 has been amended from an “apparatus” to a “computer-readable medium encoded with a computer program” to permit the claimed computer program’s functionality to be realized and thus overcome the rejections under 35 U.S.C. 101.

Claims 2-12 have similarly been amended to correctly reference claim 1 not as an “apparatus” but as a “computer-readable medium.” Therefore, because claims 1-12 as amended are now directed to statutory subject matter, withdrawal of these rejections is

Appl. No. 09/840,055
Amtd. dated March 15, 2005
Reply to Office Action of Nov. 30, 2004

respectfully requested.

III. Rejections under 35 U.S.C. § 102(a)

Claims 1-3, 6-7, 9-16, 19-20 and 22-25

1. The rejections under 102(a) are improper because they rely on improper prior art.

The rejections under 102(a) are improper because they rely on improper prior art. On page 3, item 5 of the Office Action, the examiner states “[c]laims 1-3, 6-7, 9-16, 19-20 and 22-15 are rejected under 35 U.S.C. 102(a) as being anticipated by Design Science, Inc., “WebEQ Interactive Math on the Web”, April, 1996 (see “WebEQ Equation Rendering: A Simpler Way to Include Mathematics in Web Pages”).” These rejections improperly combine multiple references that date from 1996 and 2004, while claiming that all of the references were from 1996. The first cited reference, “WebEQ Interactive Math on the Web” (which is dated by the examiner as being an April 1996 reference) is actually a November 2004 reference, and the second cited reference “WebEQ Equation Rendering: A Simpler Way to Include Mathematics in Web Pages” is an April 1996 reference. Every specific citation used to show anticipation of the claimed elements is from the 2004 reference. The 2004 reference describes a product that is dramatically different from the

Appl. No. 09/840,055
Amtd. dated March 15, 2005
Reply to Office Action of Nov. 30, 2004

product that existed on the priority date (April, 2000) of the claimed invention.

Because the cited prior art does not precede the priority date of the present application, the cited art is not prior art. Therefore, withdrawal of the present rejections is respectfully requested.

2. **The rejections under 102(a) are improper because in 2000, the WebEQ program could not generate a customized “live component viewer” through the use of a “live component editor.”**

WebEQ was trying to solve the problem of rendering math equations specified in description languages such as MathML and TeX on websites. This rendering included limited dynamic rendering capabilities. As a result of Design Sciences efforts, WebEQ was (in 2000) capable of performing functions such as: “allowing readers to adjust the size of equations”; “cutting-and-pasting parts of equations;” “toggling and highlighting on mouse-over”; and “automatically rendering MathML in IE5.” (*See “The WebEQ Math Viewer Applet,” Sept. 10, 2000, Design Science, Inc., available at <http://stuff.mit.edu/afs/athena/software/webeq/currenthome/docs/applet/welcome.html>.*) Basically, WebEQ’s limited capability only applied to rendering and did NOT include “live components” type functionality.

Appl. No. 09/840,055
Amdt. dated March 15, 2005
Reply to Office Action of Nov. 30, 2004

The presently claimed invention solves the problem of "how to easily produce live components that can not only perform calculations, but can also link web pages and embedded systems. (*See Application, paragraph 10*). The solved problem "enables nonprogrammers to design interactive systems containing live components," that for example could include not only generic computers running web browsers, but also embedded systems. (*See id.*).

As a result of the present inventors' efforts, "live components" (in 2000) had capabilities such as "active mathematics, graphics, string processing, input, output and linking" that exceeded WebEQ capabilities. (*See Application, Abstract*). "Live components" functionality includes live calculating capabilities in addition to rendering equations. For example, live functionality can include displaying the value of variables calculated using algorithms associated with mathML tags such as "eq" ("="), "plus" ("+"), "minus" ("-"), etc. (*See Application, paragraph 81*). In addition to the fact that "values may be dynamically calculated per an algorithm performed by the live component, ...[i]t is a feature of the live components that they may reference each other by data links." (*See Application, paragraph 123*).

Because the WebEQ program did not generate "live components" as disclosed in the present application, the WebEQ program could not have generated a customized "live component viewer" through the use of

Appl. No. 09/840,055
Amdt. dated March 15, 2005
Reply to Office Action of Nov. 30, 2004

a "live component editor." Therefore, withdrawal of these rejections is respectfully requested.

IV. Rejections under 35 U.S.C. § 103

A. Dependent Claims 4-5, and 8

Applicant believes that amended independent Claim 1 is now in condition for allowance for at least the reasons stated above. Claims 4-5 and 8 ultimately depend on independent Claim 1 and hence contain all of the limitations of that base claim. Therefore, withdrawal of the rejections against those claims is respectfully requested.

B. Dependent Claims 17-18, and 21

Applicant believes that amended independent Claim 13 is now in condition for allowance for at least the reasons stated above. Claims 17-18 and 21 ultimately depend on independent Claim 13 and hence contain all of the limitations of that base claim. Therefore, withdrawal of the rejections against those claims is respectfully requested.

III. Conclusion

For all of the reasons advanced above, Applicant respectfully submits that the application is in condition for allowance and that action is respectfully solicited. If there are any outstanding issues that might be resolved by an interview or an Examiner's amendment, the Examiner is requested to call Applicants' agent at the telephone number shown below.

Appl. No. 09/840,055
Amdt. dated March 15, 2005
Reply to Office Action of Nov. 30, 2004

The Commissioner is hereby authorized to charge any additional fees which may be required for this amendment, or credit any overpayment, to Deposit Account No. 50-1450.

In the event that an extension of time is required, or may be required in addition to that requested in a petition for an extension for time, the Commissioner is requested to grant an extension a petition for that extension of time which is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to Deposit Account No. 50-1450.

Respectfully submitted,

/David G Grossman Reg #42,609/

David G. Grossman
Registration No. 42,609

Date: March 15, 2005

Patent-Services.com
1408 Bayshire Lane
Herndon, VA 20170
(703) 338-6333